

<h1 style="margin: 0;">FEE TRANSMITTAL FOR FY 2002</h1> <p style="font-size: small; margin: 5px 0;">Patent fees are subject to annual revision. Small Entity payments <u>must</u> be supported by a small entity statement, Otherwise large entity fees must be paid. See Forms PTO/SB/09-12.</p>		<b>Complete if Known</b>	
		Application Number	
		Filing Date	December 19, 2001
		First Named Inventor	James G. Fleming
		Examiner Name	
Group / Art Unit			
TOTAL AMOUNT OF PAYMENT		(\$) <b>1322.00</b>	
Attorney Docket No.		SD6942/S97581	

<p><b>METHOD OF PAYMENT (check one)</b></p> <p>The Commissioner is hereby authorized to charge</p> <p>1. <input checked="" type="checkbox"/> Indicated fees and credit any over payments to:</p> <p>Deposit Account Number: <b>19-0131</b></p> <p>Deposit Account Name: <b>Sandia Corporation</b></p> <p><input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17</p> <p>2. Payment Enclosed:</p> <p><input type="checkbox"/> Check <input type="checkbox"/> Money Order <input type="checkbox"/> Other</p> <hr/> <p style="text-align: center;"><b>FEE CALCULATION</b></p> <p><b>1. BASIC FILING FEE</b></p> <table style="width: 100%; font-size: x-small;"> <thead> <tr> <th>Large Fee Code</th> <th>Entity Fee (\$)</th> <th>Small Fee Code</th> <th>Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>101</td> <td>740</td> <td>201</td> <td>370</td> <td>Utility filing fee</td> <td style="text-align: center;"><b>740</b></td> </tr> <tr> <td>106</td> <td>330</td> <td>206</td> <td>165</td> <td>Design filing fee</td> <td></td> </tr> <tr> <td>107</td> <td>510</td> <td>207</td> <td>255</td> <td>Plant filing fee</td> <td></td> </tr> <tr> <td>108</td> <td>740</td> <td>208</td> <td>370</td> <td>Reissue filing fee</td> <td></td> </tr> <tr> <td>114</td> <td>160</td> <td>214</td> <td>80</td> <td>Provisional filing fee</td> <td></td> </tr> <tr> <td colspan="5" style="text-align: right;"><b>SUBTOTAL (1)</b></td> <td style="text-align: center;"><b>\$ 740</b></td> </tr> </tbody> </table> <p><b>2. EXTRA CLAIM FEES</b></p> <table style="width: 100%; font-size: x-small;"> <thead> <tr> <th colspan="2"></th> <th>Extra Claims</th> <th>Fee from below</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>Total Claims</td> <td><b>43</b></td> <td>-20**= <b>23</b></td> <td>X <b>18</b></td> <td>= <b>414</b></td> </tr> <tr> <td>Independent Claims</td> <td><b>5</b></td> <td>- 3**= <b>2</b></td> <td>X <b>84</b></td> <td>= <b>168</b></td> </tr> <tr> <td>Multiple Dependent</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p style="font-size: x-small;">**or number previously paid, if greater; For Reissues, see below.</p> <table style="width: 100%; font-size: x-small;"> <thead> <tr> <th>Large Fee Code</th> <th>Entity Fee (\$)</th> <th>Small Fee Code</th> <th>Entity Fee (\$)</th> <th>Fee Description</th> </tr> </thead> <tbody> <tr> <td>103</td> <td>18</td> <td>203</td> <td>9</td> <td>Claims in excess of 20</td> </tr> <tr> <td>102</td> <td>84</td> <td>202</td> <td>42</td> <td>Independent claims in excess of 3</td> </tr> <tr> <td>104</td> <td>280</td> <td>204</td> <td>140</td> <td>Multiple dependent claim, if not paid</td> </tr> <tr> <td>109</td> <td>84</td> <td>209</td> <td>42</td> <td>**Reissue independent claims over original patent</td> </tr> <tr> <td>110</td> <td>18</td> <td>210</td> <td>9</td> <td>**Reissue claims in excess of 20 and over original patent</td> </tr> </tbody> </table> <p style="text-align: right;"><b>SUBTOTAL (2) (\$582)</b></p>	Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid	101	740	201	370	Utility filing fee	<b>740</b>	106	330	206	165	Design filing fee		107	510	207	255	Plant filing fee		108	740	208	370	Reissue filing fee		114	160	214	80	Provisional filing fee		<b>SUBTOTAL (1)</b>					<b>\$ 740</b>			Extra Claims	Fee from below	Fee Paid	Total Claims	<b>43</b>	-20**= <b>23</b>	X <b>18</b>	= <b>414</b>	Independent Claims	<b>5</b>	- 3**= <b>2</b>	X <b>84</b>	= <b>168</b>	Multiple Dependent					Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	103	18	203	9	Claims in excess of 20	102	84	202	42	Independent claims in excess of 3	104	280	204	140	Multiple dependent claim, if not paid	109	84	209	42	**Reissue independent claims over original patent	110	18	210	9	**Reissue claims in excess of 20 and over original patent	<p><b>3. 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late filing fee or oath		127	50	227	25	Surcharge - late provisional filing fee or cover sheet		139	130	139	130	Non-English specification		147	2,520	147	2,520	For filing a request for reexamination		112	920*	112	920*	Requesting publication of SIR prior to Examiner action		113	1,840	11	1,840	Requesting publication of SIR after Examiner		115	110	215	55	Extension for reply within first month		116	400	216	200	Extension for reply within second month		117	920	217	460	Extension for reply within third month		118	1,440	218	720	Extension for reply within fourth month		128	1,960	228	980	Extension for reply within fifth month		119	310	219	155	Notice of Appeal		120	310	220	155	Filing a brief in support of an appeal		121	270	221	135	Request for oral hearing		138	1,510	138	1,510	Petition to institute a public use proceeding		140	110	240	55	Petition to revive - unavoidable		141	1,240	241	620	Petition to revive - unintentional		142	1,240	242	620	Utility issue fee (or reissue)		143	440	243	220	Design issue fee		144	600	244	300	Plant issue fee		122	130	122	130	Petitions to the Commissioner		123	50	123	50	Petitions related to provisional applications		126	240	126	240	Submission of Information Disclosure Stmt		581	40	581	40	Recording each patent assignment per property (times number of properties)		146	710	246	355	Filing a submission after final refection (37 CFR 1.129(a))		149	710	249	355	For each additional invention to be examined (37 CFR 1.129(b))		Other fee (specify) _____						Other fee (specify) _____						<b>SUBTOTAL (3) (\$)</b>					
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<b>SUBMITTED BY</b>				<b>Complete (if applicable)</b>	
Typed or Printed Name	KEVIN W. BIEG			Reg. Number	40,912
Signature				Deposit Account User ID	19-0131
	Date	12/18/01			

12/19/01  
 10/02547  
 PC979 U.S. PRO

Form PTO-1449 (SNL-Modified) (2-91)  
List of Patents and Publications  
for Applicant's  
Information Disclosure Statement

Atty Docket No: SD6942/S97581  
Serial Number:

APPLICANT: Fleming et al.

(use several sheets if necessary)

GROUP:

FILING DATE: December 18, 2001

JC978 U.S. PTO  
10/025447



REFERENCE DESIGNATION

Ex'r Init			U.S. Patent Documents			Sub			
	Document No.	Date	Name	Class	Class	File Date			
						Translation			
						Document No.	Date	Name	Class

SP |AA | 6,020,272 2/1/00 Fleming  
SP |AB | 5,995,696 11/30/99 Miyagi et al.  
SP |AC | 5,815,627 9/29/98 Harrington  
SP |AD | 4,688,893 8/25/87 Lackmann  
SP |AE | WO 00/22466 4/20/00 Fink et al.

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

SP |BA | Jackson, J.D., Classical Electrodynamics, John Wiley & Sons, Inc., NY, pp218-221 (1962)  
SP |BB | Nishihara et al., "Low-loss parallel plate waveguide at 10.6  $\mu$ m," Appl. Phys. Lett. 25, 391 (1974)  
SP |BC | Yeh et al., "Theory of the Bragg fiber," J. Opt. Soc. Am. 68(9), 1196 (1978)  
SP |BD | Harrington et al., "Review of hollow waveguide technology," SPIE 2396, 4 (1995)  
SP |BE | Fink et al., "A Dielectric Omnidirectional Reflector," Science 282, 1679 (1998)  
SP |BF | Fink et al., "Guiding Optical Light in Air Using an All-Dielectric Structure," J. Lightwave Tech. 17(11), 2039 (1999)  
SP |BG | Ibanescu et al., "An All-Dielectric Coaxial Waveguide," Science 289, 415 (2000)  
SP |BH | Miura et al., "Hollow Optical Waveguide for Temperature-Insensitive Photonic Integrated Circuits," Jpn. J. Appl. Phys. 40, L688 (2001)  
SP |BI | Deopura et al., "Dielectric omnidirectional visible reflector," Optics Letters 26(15), 1197 (2001)

Examiner:

*Greg Park*

Date Considered:

9/21/03

12-26-01

12/19/01  
1132 U.S. PTO

SD6942/S97681  
Express Mail No.: EL026586509US

10/025447  
10/19/01  
JC978 U.S. PTO

ASSISTANT COMMISSIONER FOR PATENTS  
BOX PATENT APPLICATION  
WASHINGTON, D.C. 20231

**UTILITY PATENT APPLICATION TRANSMITTAL**  
**Under 37 CFR 1.53(b)**

Transmitted herewith for filing is the patent application of

INVENTOR(S): James G. Fleming, Shawn-Yu Lin, and G. Ronald Hadley

FOR: MICROFABRICATED BRAGG WAVEGUIDE

**I. APPLICATION ELEMENTS**

1. ☒ Fee Transmittal Form (original + duplicate)
2. ☒ Specification  
Total Pages ---26---
3. ☒ Drawings  
Total Sheets --- 8- --
4. ☒ Oath or Declaration (with Power of Attorney) Total Pages 3
  - a. ☒ Newly Executed
  - b. ☐ Copy from Prior Application  
(Continuation or Divisional)

☐ Deletion of Inventors  
Signed Statement Attached Deleting Inventor(s) named in  
prior Application. 37 CFR 1.63(d)(2) and 1.33(b).
5. ☐ Incorporation by Reference (if Box 4b is checked). The entire disclosure of the prior application(s) from which a copy of the Oath or Declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
6. ☐ Microfiche Computer Program (Appendix)

**II. ACCOMPANYING APPLICATION PARTS**

7. ☐ Assignment Papers (cover sheet and document(s))
8. ☐ 37 CFR 3.73(b) Statement (where there is an assignee) ☒ Power of Attorney (with the Declaration)
9. ☒ Information Disclosure Statement (IDS)/PTO-1449 ☒ Copies of IDS Citations
10. ☐ Preliminary Amendment
11. ☒ Return Receipt Postcard (Itemized)
12. ☐ Other

**III. IF A CONTINUING APPLICATION**


☐ Continuation ☐ Divisional ☐ Continuation-in-Part (CIP)  
of prior application No.

**IV. CORRESPONDENCE ADDRESS**

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P. O. Box 5800 - MS-0161  
Albuquerque, New Mexico 87185-0161

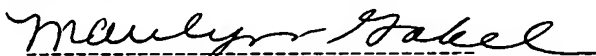
Phone: (505) 844-8600  
FAX: (505) 844-1418

Dated: 12/18/01

  
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Kevin W. Bieg, 40,912  
Sandia National Laboratories  
Patent & Licensing Center, 11500  
P. O. Box 5800 / MS 0161  
Albuquerque, NM 87185-0161  
Telephone: (505) 284-4784

**CERTIFICATION UNDER 37 CFR 1.10**

I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the U. S. Postal Service on the 19th day of December, 2001, in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EL026586509US, addressed to the: Assistant Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.

  
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Marilynn Gabel

<b>NONPUBLICATION REQUEST UNDER 35 U.S.C. 122(b)(2)(B)(i)</b>	First Named Inventor		James G. Fleming
	Title	Microfabricated Bragg Waveguide	
	Atty Docket Number		SD6942/S97581

I hereby certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing.

I hereby request that the attached application not be published under 35 U.S.C. 122(b).

12/18/01

Date

*Kevin W Bieg*

Signature

Kevin W. Bieg, Reg. No. 40,912  
Typed or printed name

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application **upon filing**.

Application may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant **must** notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. **Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).**

10025447-121901